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| Criteria E – Processing data | Organize, transform and present data using visual forms |
| Analyze and interpret data |
| Draw conclusions consistent with the data and supported by scientific reasoning and language appropriate to the age level. |
| Criteria F – Attitudes in science | Work effectively as individuals and as part of a group by collaborating with others |

Cell Phone Sorting and Grouping Assessment Task

Using the photographs that your group has from the cell phone sorting activity put together a presentation (either multimedia or on A3 paper) that clearly describes how you sorted the cell phones. In a two minute presentation you will present this to the class on November 5th. After the presentations on a separate piece of paper answer the following questions:

1. Could the class work out what features you used each time you sorted the phones into groups?
2. List the features that you used to sort the phones into groups. Show this as a diagram.
3. What features did the rest of the class use to sort their phones into groups?
4. Were some phones hard to sort into groups? Why was this?
5. Look at the list of features that you used to sort your mobile phones into groups. What do all of these features have in common?
6. Were the mobile phones in each group more similar at the beginning of the activity (when they were in one big group) or at the end (when they were in smaller groups)? Explain your answer.
7. The general agreement within the scientific community is that grouping things enables us to understand things better. Knowing what you know about sorting and grouping from this activity do you agree with this statement? Please explain your reasoning.
8. Write a minimum one to three paragraph reflection of this activity. Describe how you feel that you contributed to the group discussion and decision making process, how you feel your group members contributed to the discussion and decision making process and outline any issues that arose within the group and how you worked to solve these issues.

**Cell Phone Sorting and Grouping Assessment Criteria**

**Criterion E – Processing Data**

**Achievement Level**

Descriptor

**0**

The student does not reach a standard described by any of the descriptors below.

**1-2**

The student sorts the cell phones into groups but it is unclear why they have sorted them this way. The student attempts to present their data in a diagram but their reasoning for grouping the phones is absent. The student is unable to describe a relationship between the similarities of features and the size of the group. The student states whether they agree or disagree with the unit question but makes little to no attempt at explaining.

**3-4**

The student sorts the cell phones into roughly equal groups and that are somewhat easy to understand. The student is able to present their data in a diagram but the reasons for grouping the phones are unclear or incorrect. The student attempts to describe a relationship shown between similarities of features and the size of the group. The student describes whether they agree or disagree with the unit question but has difficulty clearly explaining, using age appropriate scientific language and reasoning.

**5-6**

The student sorts the cell phones into roughly equal groups that are very clearly different from one another. The student is able to present their data in a diagram that clearly describes the reasoning for the grouping. The student is able to describe correctly the relationship shown between similarities of features and the size of the group. The student describes whether they agree or disagree with the unit question and can explain in a detailed way using age appropriate scientific language and reasoning.

**Criterion F – Attitudes in Science**

**Achievement Level**

Descriptor

**0**

The student does not reach a standard described by any of the descriptors below.

**1-2**

The group reflections describe a lack of effort from this group member. The student is able to mostly work as part of a group, but sometimes they need reminders or advice on how to cooperate with others.

**3-4**

The group reflections describe effort from this group member but it is not considered equal to others. The student is generally able to work in a cooperative way when working as part of a group.

**5-6**

The group reflections describe great effort from this group member and concur that it was an equal effort from all group members. The student is able to cooperate with others when working as part of a group.